Appln. No. 10/053,869 Amd. dated April 29, 2005 Reply to Office Action of December 1, 2004

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:
Listing of Claims:

- 1-5. Canceled.
- 6. (currently amended) A reaction probe chip for binding an analyte to be detected, comprising:
- a plurality of stacked <u>organic</u> substrates each in the form of a film or sheet, each having a plurality of discrete through-holes, said substrates being stacked so that said through-holes are aligned;

a carrier filled in the plurality of discrete through-holes, said carrier being relatively porous compared with said substrates; and

probe molecules attached to a surface of the carrier for binding the analyte to be detected,

wherein the probe molecules attached to the surface of the carrier in a first group of the through-holes are different from the probe molecules attached to the surface of the carrier in a second group of the through-holes.

7. (Previously Presented) A reaction probe chip according to claim 6, wherein the carrier is selected from the

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group consisting of a porous membrane, a nonwoven fabric, and a powder of porous glass.

- 8. (Previously Presented) A reaction probe chip according to claim 7, wherein a pore size of the porous membrane or the powder of porous glass is 0.1 to 0.5  $\mu m\,.$
- 9. (Previously Presented) A reaction probe chip according to claim 7, wherein a particle size of the powder of porous glass is 1 to 100 microns.
- 10. (Previously Presented) A reaction probe chip according to claim 6 wherein the probe molecule is selected from the group consisting of DNA, RNA, PNA, their fragments, oligonucleotides, antigens, antibodies, epitopes, enzymes, proteins, and their polypeptide chains having at least one functional site.
- 11. (previously presented) A reaction probe chip according to claim 6, wherein contacting surfaces of said stacked substrates are smoothed whereby aligned respective through-holes of adjacent substrates are liquid-tight so that liquid will not move laterally between said contacting surfaces to reach spaced apart through-holes.

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- 12. (new) The reaction probe chip of claim 6, wherein each of said plurality of stacked organic substrates comprises a pair of plastic films heat sealed together, and said carrier comprises a filter paper sandwiched between said pair of plastic films heat sealed together.
- 13. (new) The reaction probe chip of claim 12, wherein said filter paper is a glass fiber filter paper and said plastic films comprise polyethylene terephthalate.

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